

## **Sheridan County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 5/24/2016

Using the most recent IMPLAN data available (2014) adjusted for 2016, 8 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Sheridan County economy.<sup>1</sup>

These 8 sectors have a total direct output of approximately **\$323.2 million** and support **451.8 jobs** in Sheridan County. Running the model for all 8 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Sheridan County Economy							
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product	
Direct Effect	451.8	23.93%	\$143,258,081.13	63.10%	\$323,234,562.37	142.37%	
Indirect Effect	244.6	12.96%	\$21,015,829.56	9.26%	\$31,312,064.83	13.79%	
Induced Effect	105.3	5.58%	\$7,728,187.49	3.40%	\$13,746,395.90	6.05%	
Total Effect	801.8	42.47%	\$172,002,098.18	75.76%	\$368,293,023.10	162.21%	

As shown in the above table, agriculture, food, and food processing sectors support **801.8 jobs**, or **42.47%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately \$368.3 million, roughly 162.21% of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 8 agriculture, food, and food processing sectors is approximately \$172 million, or 75.76% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 75.76% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70">http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70</a>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

 $<sup>5\</sup> Output = intermediate\ inputs + value\ added.$ 

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **385.5 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Sheridan County.

Top Ten Sectors by Employment					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	385.5	\$227,194,381.23			
Support activities for agriculture and forestry	128.6	\$11,996,347.95			
Grain farming	43.2	\$75,237,643.00			
Wholesale trade	37.6	\$8,776,514.91			
Monetary authorities and depository credit intermediation	24.5	\$3,805,048.97			
Truck transportation	18.3	\$4,071,174.76			
Services to buildings	15.0	\$278,292.72			
Individual and family services	10.2	\$261,820.52			
Animal production, except cattle and poultry and eggs	10.0	\$4,485,885.13			
All other crop farming	9.5	\$3,512,105.35			

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately \$227.2 million to the Sheridan County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Sectors by Output					
Sector	Total Employment	Total Output			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	385.5	\$227,194,381.23			
Grain farming	43.2	\$75,237,643.00			
Support activities for agriculture and forestry	128.6	\$11,996,347.95			
Oilseed farming	2.0	\$11,641,789.84			
Wholesale trade	37.6	\$8,776,514.91			
Owner-occupied dwellings	0.0	\$4,622,227.87			
Animal production, except cattle and poultry and eggs	10.0	\$4,485,885.13			
Truck transportation	18.3	\$4,071,174.76			
Monetary authorities and depository credit intermediation	24.5	\$3,805,048.97			
All other crop farming	9.5	\$3,512,105.35			

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Sheridan County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	2.0	\$11,641,789.84		
Grain farming	43.2	\$75,237,643.00		
Vegetable and melon farming	0.2	\$83,696.41		
All other crop farming	9.5	\$3,512,105.35		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	385.5	\$227,194,381.23		
Poultry and egg production	0.5	\$970,236.72		
Animal production, except cattle and poultry and eggs	10.0	\$4,485,885.13		
Bread and bakery product, except frozen, manufacturing	1.0	\$108,824.70		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Sheridan County, the retail sector was omitted.